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BREDIN-ARCHBOLD-SMITHSONIAN BIOLOGICAL SURVEY OF DOMINICA

2. New Species of Diptera from Dominica (Anisopodidae and Bibionidae)¹

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Family Anisopodidae

Recent collecting by J. F. G. Clarke, H. E. Evans, O. S. Flint, Jr., R. J. Gagné, and W. W. Wirth for the Bredin-Archbold-Smithsonian Survey of Dominica resulted in 34 specimens of two apparently undescribed species in two genera of the family Anisopodidae. The *Mycetobia* species is the third one described from the New World and the second from the Neotropical Region. The abundant *Olbiogaster* species has male terminalia apparently identical with those of *O. antillarum* Lane and Andretta from St. Croix, but the color differences are too great to permit determination as that species. A second *Olbiogaster* is represented by a single male with very distinctive terminalia.

Mycetobia limanda, new species

Female: Vertex black, the ocelli yellow; eyes separated by slightly less than width of anterior ocellus; occiput laterally yellow; antenna black, the scape and pedicel slightly brownish; face yellow; palpi and

¹ Other faunal studies in this series are: 1, Kier, Proc. U.S. Nat. Mus., 1966, vol. 121, no. 3577, pp. 1-9. A companion series on the flora appears in the "Contributions of the United States National Herbarium."

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mouthparts darkened. Mesonotum subshining, dark reddish brown medially, somewhat paler laterally; pronotum yellowish brown but not contrasting with sides of mesonotum; hairs and setae of mesonotum brown; scutellum yellowish brown with four setae; pleuron, postnotum, and halter yellow brown. Wing hyaline, slightly tinged with yellow; veins dark; subcosta ending just before level of radial sector fork; under side of subcosta with row of long hairs. Foreleg yellow brown, the tarsus slightly darkened; midleg the same but tibia darkened except at extreme base; hindleg mostly yellowish, the coxa posteriorly and femur near apex darkened. Dorsum of abdomen nearly black except for tergum I, tergum II laterally, tergum VIII, and terminalia, which are brownish yellow; venter yellowish with some darkening laterally before apex. Length 2.5–3.5 mm. Wing 3–4 mm.

Male: Coloration as in female. Eyes nearly touching. Genital capsule not as long as terga VI and VII combined whereas this is longer in *M. divergens*. Slightly smaller than female.

Distribution: Dominica, Lesser Antilles; probably Costa Rica.

Holotype: ♀, Clarke Hall, Jan. 18, 1965 (Wirth).

Paratypes: Clarke Hall, Mar. 21–31, 1965, 1 ♀; Clarke Hall, Feb. 11–20, 1965, 1 ♀ (all Wirth). (USNM nos. 68, 116.)

A single specimen bearing the data "La Suiza de Turrialba, Costa Rica, Aug. Pablo Schild" in the U.S. National Museum is apparently this species. It differs only in having the midtibia paler.

Because of the contrasting yellowish tip of the abdomen, I use as a specific name the generic name of the flounder known as the Yellow Tail.

The three New World species of *Mycetobia* may be differentiated by the following key:

1. Subcosta bare (Nearctic) ***divergens*** Walker
Subcosta with numerous long setae ventrally (Neotropical) 2
2. Thorax, abdomen, and legs strongly patterned with dark markings; wing more than 5 mm long ***stonei*** Lane and Andretta
No distinctive pattern except for yellowish at base and tip of abdomen; wing not more than 4 mm long ***limanda***, new species

***Olbiogaster danista*, new species**

Female: Frons and occiput dark, grayish pruinose, only the ocellar triangle shining black; scape and pedicel yellow, flagellum black; face yellow, in some slightly darkened above; palpus and mouthparts yellow. Thorax mostly yellow with yellowish and some brown hairs, with or without a pair of elongate darker markings on mesonotum anteriorly, and a darkened spot on upper mesopleuron; scutellum dark except at base, with a row of many dark hairs; postnotum somewhat infuscated medially; halter with yellow stem, black knob.

Wing hyaline except for dark stigmal spot on anterior inner basal portion of coxa and tarsus; midleg yellow except for dark coxa, apical two-thirds of femur, and tarsus; hindleg yellow except for dark coxa, apical two-thirds of femur, and tarsus. Abdomen with three dark spots on tergum I, usually clearly separated; terga II–V black on basal half, yellow on apical half; terga VI and VII dark except very narrow basally; venter yellow with sterna III–V more or less darkened basally, VI and VII apically. Body and wing length each 6–6.5 mm.

Male: Coloration as in female except abdomen beyond tergum I with wider black areas. Terminalia indistinguishable from those of the type of *O. antillarum*. Lane and Andretta (1958, p. 517, fig. 19) figured those for *antillarum*.

Distribution: Dominica, Lesser Antilles.

Holotype: ♀, Clarke Hall, Jan. 11–20, 1965 (Wirth).

Paratypes: same data, 1 ♀, 3 ♂♂; Clarke Hall, Mar. 1–10, 1965, 1 ♀, 1 ♂, and Mar. 21–31, 1965, 1 ♂ (Wirth); 5 miles south of Pont Casse, Apr. 11, 1964 (Flint), 1 ♀; Clarke Hall, Apr. 12, 1964 (Flint), 1 ♀; Hillsborough Estate, Mar. 15, 1965 (Wirth), 6 ♂♂; Cabrits Swamp, Feb. 23, 1965 (Wirth), 1 ♂; Layou R. mouth, Mar. 8, 1965 (Wirth), 1 ♂; Antrim, 1000 ft. Mar. 12, 1956 (Clarke), 1 ♂; Newfoundland, on road to Rosalie, 1000 ft. Apr. 13, 1966 (Gagné), 1 ♂. (USNM Nos. 68, 117.)

This species would run in the key of Lane and Andretta (1958) to *O. similans* Lane and Andretta, but *similans* has all coxae entirely dark (not implied in key), the base of tergum I broadly dark, the mesonotum and pleura mostly dark, and the stigma not crossing vein R_1 . From *antillarum* Lane and Andretta, *danista* differs in having the knob of the halter dark, the sternopleuron entirely yellow, and terga IV and V with broad apical yellow bands rather than with only lateral spots.

The name of this species (from the Greek word “danista,” meaning “money-lender”) was suggested by the three dark spots on the first tergum reminiscent of a pawnbroker’s sign.

Olbiogaster evansi, new species

Male: Frons and occiput dark, thinly grayish pruinose; scape and pedicel yellow, flagellum black; face yellow; palpus and mouth-parts yellow. Thorax mostly blackish with brown hairs; pronotum yellow; mesonotum faintly reddish anterolaterally and before scutellum; area around anterior spiracle and mesepimeron yellowish; mesopleuron shiny black with a few hairs above and a broad transverse band of gray pollinosity. Halter with yellow stem, black knob. Wing hyaline except for narrow stigmal spot crossing cell R_1 . Legs mostly dark but with the following yellow: A large patch

anteriorly on forecoxa; fore- and midfemora; fore- and midtibiae, but slightly darkened. Abdomen with terga shiny black except for narrow yellow hind margins on I-V, slightly widened laterally; sterna I-V mostly yellow, a dark area on side of sternum II. Wing length 5.5 mm. Terminalia as figured (fig. 1).

Holotype: ♂, South Chiltern, 1600 feet, Feb. 19, 1965 (Evans), (USNM 69076).

This species would run in the key of Lane and Andretta (1958) to *O. chavantesi* Lane and Andretta, but the color pattern of the head, thorax, coxae, and sterna, and the structures of the terminalia are different. The terminalia are closest to those of *similans* Lane and Andretta, but the appendages lying dorsad of the cerci are broad

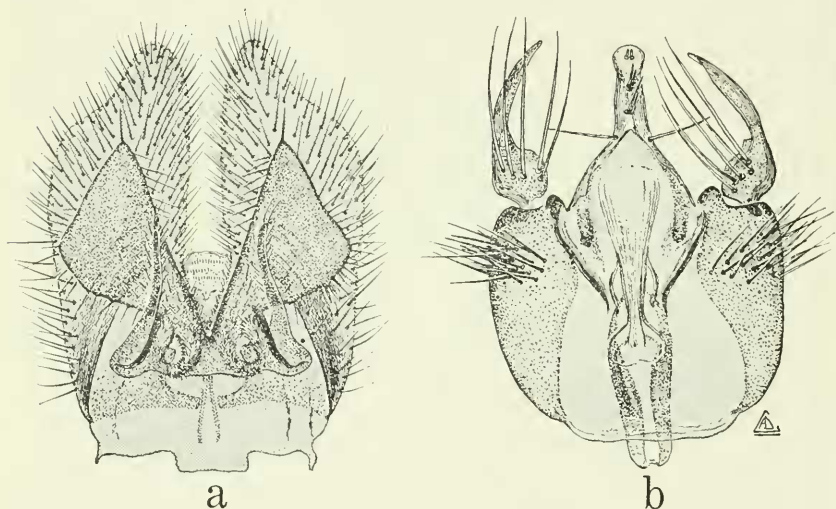


FIGURE 1.—*Olbiogaster evansi*, new species, male terminalia, dorsal view: a, cerci and attached appendages; b, aedeagus and attached appendages (drawn by Arthur D. Cushman).

and flat, not narrow and rodlike, and in *similans* the tergal yellow bands are much broader and the sterna are mostly black.

This species is dedicated to the collector, Howard E. Evans.

Family Bibionidae

The only Bibionidae collected on Dominica by the Bredin-Archbold Smithsonian Survey consisted of 21 specimens of an apparently undescribed species of the genus *Plecia* Wiedemann. I take this opportunity to describe it.

Plecia porca, new species

An entirely dark brownish-black species with four shiny stripes on notum and fumose wings. It runs to couplet 5 of Hardy's key (1945,

p. 391) but with very different distimeres (harpagones) from the two species of that couplet.

Male: Head: Antenna black with 7 cylindrical flagellomeres, the first about as long as scape and pedicel combined, the others subquadrate except last, which is reduced in size, hemispherical. Rostrum about equal to antenna in length, shorter than head and sharply turned backward under head, reddish except near apex. Thorax brownish pruinose, the notum dull reddish before scutellum and on sides, the three narrow dorsal stripes somewhat grayish; a submedian pair of raised, narrow, polished black stripes on median half of notum and a pair of similar but broader stripes from just behind the antero-lateral depression to corner of scutellum, often slightly reddish poste-

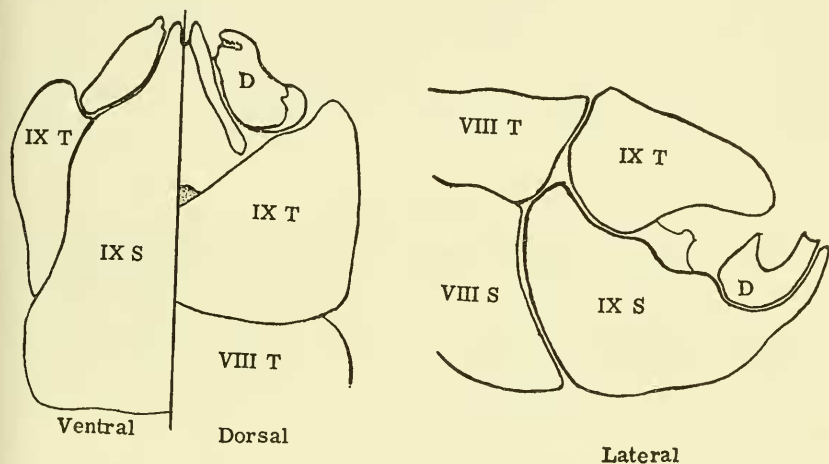


FIGURE 2.—*Plecia porca*, new species, male terminalia, ventral, dorsal, and lateral views (D=distimere, S=sternum, T=tergum).

riorly; scutellum and postnotum dull; anterior pronotum and upper portion of sternopleuron with hairs; hairs of mesonotal furrows very small. Wing fumose, the stigma and costal cell darker; veins dark with short fine hairs; vein R_3 curved toward apex, shorter than basal portion of radial sector; r-m crossvein about half way between medial crossvein and fork of M. Halter, legs and abdomen nearly black. Terminalia (fig. 2): Ninth tergum with a broad triangular emargination posteriorly with an inwardly turning pair of somewhat shiny protuberances in the median angle; a low protuberance medially near base; ninth sternum slightly concave medially near apex with a pair of marginal ridges each ending in a slender submedian process; distimere rather shiny black but covered with hairs except on the concave dorsal surface; each distimere bilobed, the apico-median lobe with a

transverse depression in the apex and the lateral lobe curving dorsally to a point. Length of wing 6.5-7.0 mm.

Female: Coloration and other nonsexual characters as in male except that the antenna has 9 flagellomeres. Frons subshining medially, the sides and occiput with brownish pollinosity; distance between eyes about equal to smallest transverse dimension of eye; rostrum slightly shorter than antenna. Wing length 8.0 mm.

Holotype: Sylvania, Dominica, Jan. 28, 1965 (Clarke and Clarke), ♂, (USNM 68228).

Paratypes: 1800 ft., Pont Casse, Jan. 12, 1965 (Clarke and Clarke), 1 ♂; mouth of Layou River, Jan. 20, 1965 (Clarke and Clarke), 1 ♂; light trap, Sylvania, Jan. 23, 1965 (Wirth), 1 ♂; grassy marsh, Sylvania, Jan. 25, 1965 (Wirth), 6 ♂, 1 ♀; 2.5 miles west of Pont Casse, Jan. 27, 1965 (Wirth), 1 ♂, 1 ♀; 2 miles west of Ponte Casse, Jan. 27, 1965 (Wirth), 1 ♂; Sylvania, Jan. 28, 1965 (Clarke and Clarke), 2 ♂; 0.5 miles west of Point Lolo, Jan. 28, 1965 (Wirth), 2 ♂; 1 mile east of Pont Casse, Jan. 29, 1965 (Wirth), 1 ♀; Clarke Hall, Apr. 5, 1965, (Flint), 1 ♂, 1 ♀.

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